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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/674,638	11/02/2000	Hidekuni Moriya	Q 60961	8917

7590 02/04/2005  
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EXAMINER

BRINICH, STEPHEN M

ART UNIT PAPER NUMBER

2624

DATE MAILED: 02/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/674,638	<b>Applicant(s)</b> MORIYA ET AL.	
	<b>Examiner</b> Stephen M Brinich	<b>Art Unit</b> 2624	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 20 October 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 11-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-4, 7, 11, 12, 15 and 16 is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☒ Claim(s) 5, 6, 8, 9 and 13-15 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>7/15/04</u> . | 6) <input type="checkbox"/> Other: _____  |

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**DETAILED ACTION**

***Response to Arguments***

1. Applicant's arguments, see Response filed 10/20/04: page 8, lines 4-8, with respect to the objection to claims 5-14 for improper multiple dependency have been fully considered and are persuasive. The objection to claims 5-14 has been withdrawn.
2. Applicant's arguments, see Response filed 10/20/04: page 8, line 9 - page 11, line 6 with respect to the rejection(s) of claim(s) 1-4 & 15-16 under 35 USC §102 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Kanamori or Tinkler in view of Nakata.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claims 1-3, 7, 11-12, & 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanamori (EP 0845716) in view of Nakata.

Re claims 1-3, 11-12, & 15-16, Kanamori discloses (Abstract; page 1, lines 40-53; page 6, line 54 - page 7, line 24; Figures 4 & 13-16) an image data processing arrangement in which a matrix of acquired image data is subjected to histogram (frequency distribution) analysis. The result of this analysis is used to detect image background regions when a white peak (i.e. a frequency count having a sufficiently high occurrence to register as a "peak") is detected.

Further re claims 1-3, 7, 11-12, & 15-16, Kanamori does not disclose the designation of image data as color or monochrome in conjunction with a histogram analysis for demarcating an image background region. The designation of image data as color or monochrome and the demarcation and removal of image background ("ground color level") regions in conjunction with a histogram analysis is known as disclosed by Nakata (column 6, lines 28-37). The use of such a designation of color or monochrome image data and demarcation and removal of image background in order to accommodate images with gray-scale (e.g. "white" paper documents) and colored (e.g. colored paper documents) backgrounds in the Kanamori background detection arrangement

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would be an expedient obvious to one of ordinary skill in the art.

5. Claims 1, 4, 7, 11-12, & 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tinkler in view of Nakata.

Re claims 1, 11-12, & 15-16, Tinkler discloses (column 3, lines 47- 62; column 7, lines 7-24) an image data processing arrangement in which a matrix of acquired image data is subjected to histogram (frequency distribution) analysis. The result of this analysis is used to detect image background regions using a standard deviation value of the histogram.

Re claim 4, in one case (column 7, lines 19-24) the processing arrangement makes this selection on the basis of a standard deviation which does not exceed a certain threshold value.

Further re claims 1, 4, 7, 11-12, & 15-16, Tinkler does not disclose the designation of image data as color or monochrome in conjunction with a histogram analysis for demarcating an image background region. The designation of image data as color or monochrome and the demarcation and removal of image background ("ground color level") regions in conjunction with a histogram analysis is known as disclosed by Nakata (column 6, lines 28-37). The use of such a designation or color or monochrome image data and demarcation and removal of image background in order to

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accommodate images with gray-scale (e.g. "white" paper documents) and colored (e.g. colored paper documents) backgrounds in the Tinkler background detection arrangement would be an expedient obvious to one of ordinary skill in the art.

***Allowable Subject Matter***

6. Claims 5-6, 8-9, & 13-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The following is a statement of reasons for the indication of allowable subject matter:

Re claim 5, the art of record does not teach or suggest the recited arrangement of combining representative background values in conjunction with the recited designation of image data as color or monochrome and histogram analysis for demarcating an image background region.

Re claim 6, the art of record does not teach or suggest the recited arrangement of frequency distribution smoothing and statistical value computation in conjunction with the recited designation of image data as color or monochrome and histogram analysis for demarcating an image background region.

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Re claim 8 (and dependent claim 9), the art of record does not teach or suggest the recited highlight retouching in accordance with a correction curve generated in response to the detection of a background region in proximity to a highlight in conjunction with the recited designation of image data as color or monochrome and histogram analysis for demarcating an image background region.

Re claim 13 (and dependent claim 14), the art of record does not teach or suggest the recited selective setting of a wider or narrower reference area in response to the recited designation of image data as color or monochrome.

#### **Conclusion**

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen M. Brinich at 703-305-4390. The examiner can normally be reached on weekdays 7:00-4:30, alternate Fridays off.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Tech Center 2600 Customer Service center at 703-306-0377.


If attempts to contact the examiner and the Customer Service Center are unsuccessful, supervisor David Moore can be contacted at 703-308-7452.

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Faxes pertaining to this application should be directed to the Tech Center 2600 official fax number, which is 703-872-9306.

  
Stephen M Brinich  
Examiner  
Art Unit 2624

smb

February 2, 2005